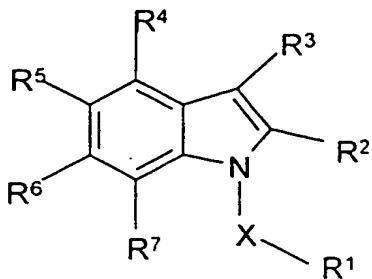


Claims

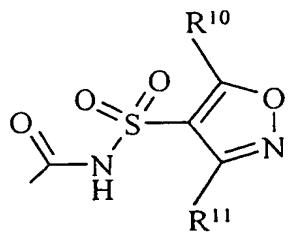
1. The use of a compound of formula (I)

5



(I)

or a pharmaceutically acceptable salt, amide or ester thereof;

10 X is CH₂ or SO₂R¹ is an optionally substituted aryl or heteroaryl ring;R² is carboxy, cyano, -C(O)CH₂OH, -CONHR⁸, -SO₂NHR⁹, tetrazol-5-yl, SO₃H, or a group of formula (VI)

15

(VI)

where R⁸ is selected from hydrogen, alkyl, aryl, cyano, hydroxy, -SO₂R¹² where R¹² is alkyl, aryl, heteroaryl, or haloalkyl, or R⁸ is a group-(CHR¹³)_r-COOH where r is an integer of 1-3 and each R¹³ group is independently selected from hydrogen or alkyl; R⁹ is hydrogen, alkyl, optionally substituted aryl such as optionally substituted phenyl or optionally substituted

20 heteroaryl such as 5 or 6 membered heteroaryl groups, or a group COR¹⁴ where R¹⁴ is alkyl, aryl, heteroaryl or haloalkyl; R¹⁰ and R¹¹ are independently selected from hydrogen or alkyl, particularly C₁₋₄ alkyl;

R³ is a group OR¹⁵, S(O)_qR¹⁵, NHCOR¹⁶, NHSO₂R¹⁶, (CH₂)_sCOOH, (CH₂)_tCONR¹⁷R¹⁸, NR¹⁷R¹⁸, SO₂NR¹⁷R¹⁸ or optionally substituted alkenyl, where q is 0, 1 or 2, s is 0 or an integer of from 1 to 4, t is 0 or an integer of from 1 to 4, R¹⁵ is a substituted alkyl or cycloalkyl group or an optionally substituted heteroaryl group, R¹⁶ is optionally substituted alkyl,

5 optionally substituted aryl or optionally substituted heteroaryl and R¹⁷ and R¹⁸ are independently selected from hydrogen, optionally substituted alkyl, optionally substituted aryl and optionally substituted heteroaryl, with the proviso that at least one of R¹⁷ or R¹⁸ is other than hydrogen, or R¹⁶ and R¹⁷ together with the nitrogen atom to which they are attached form an optionally substituted heterocyclic ring which optionally contains further

10 heteroatoms; and

R⁴, R⁵, R⁶ and R⁷ are independently selected from hydrogen, a functional group or an optionally substituted hydrocarbyl groups or optionally substituted heterocyclic groups, provided that R⁴ is other than a group, OR¹⁸, S(O)_mR¹⁸, NR¹⁹R²⁰, C(O)NR¹⁹R²⁰, NHCOR¹⁸, NHSO₂R¹⁸ or OCONR¹⁹R²⁰ or an alkyl group substituted by OR¹⁸, S(O)_mR¹⁸, NR¹⁹R²⁰ where R¹⁸

15 , R¹⁹ and R²⁰ are independently selected from hydrogen or optionally substituted hydrocarbyl, or R¹⁹ and R²⁰ together with the atom to which they are attached, form an optionally substituted heterocyclyl ring as defined above which optionally contains further heteroatoms such as S(O)_n, oxygen and nitrogen, m is 0 or an integer of 1-3 and R¹⁸ is a substituted hydrogen-containing alkyl group,

20 for use in the preparation of a medicament for the inhibition of monocyte chemoattractant protein-1 and/or RANTES induced chemotaxis.

2. The use according to claim 1 wherein in the compound of formula (I), R⁴ is hydrogen, hydroxy, halo, alkoxy, aryloxy or an optionally substituted hydrocarbyl group or optionally substituted heterocyclic group.

3. The use according to any one of the preceding claims Particular groups R³ include OR¹⁵, S(O)_qR¹⁵, NHCOR¹⁶, NHSO₂R¹⁶, SO₂NR¹⁷R¹⁸ where q, R¹⁵, R¹⁶, R¹⁷ and R¹⁸ are as defined in claim 1.

4. The use according to any one of the preceding claims wherein R³ is a group of formula -O(CH₂)_a[(CHOH)(CH₂)_b]_dCH₂OH where a is 0 or an integer of from 1 to 4, b is 0 or an integer of from 1 to 3, and d is 0, or 1.

5 5. The use according to any one of the preceding claims wherein R¹ is 3,4-dichlorophenyl, 3-fluoro-4-chlorophenyl, 3-chloro-4-fluorophenyl or 2,3-dichloropyrid-5-yl.

6. The use according to any one of the preceding claims where X is CH₂.

10 7. A compound for use in therapy, said compound comprising a compound of formula (IA) which is a compound of formula (I) as defined in claim 1 subject to the following provisos:

(i) when R² is carboxy or a salt or amide thereof, at least three of R⁴, R⁵, R⁶ and R⁷ are hydrogen, and R³ is S(O)qR¹⁵, R¹⁵ is other than C₁₋₄ alkyl substituted by carboxy or an ester or amide derivative thereof;

(ii) when R³ is a group NHCOR¹⁶ or NHSO₂R¹⁶, R¹⁶ is optionally substituted alkyl; and

(iii) where R³ is a group SR¹⁴ where R¹⁴ is 2-quinolylmethyl, R² is COOH or an ethyl ester thereof, each of R⁴, R⁵, and R⁷ are hydrogen, R¹ is 4-chlorophenyl, R⁶ is other than 2-quinolylmethyl.

20

8. A pharmaceutical compositions comprising a compound of formula (IA) as defined in claim 7 in combination with a pharmaceutically acceptable carrier.

9. A compound of formula (IB) which is a compound of formula (IA) as defined in claim 7, subject to the following further provisos:

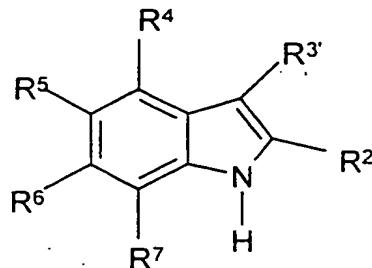
(iv) where R³ is a group COOH or CH₂COOH, R² is COOH and each of R⁴, R⁵, R⁶ and R⁷ are hydrogen, R¹ is other than unsubstituted phenyl; and

(v) where R³ is a group CH₂COOH, R² is COOH and each of R⁴, R⁵, and R⁷ are hydrogen, R¹ is 4-chlorophenyl, R⁶ is other than methoxy; and

30 (vi) when R³ is OR¹⁵ or S(O)_qR¹⁵, R¹⁵ is other than C₁₋₆ haloalkyl; and

(vii) when R² is COOCH₂CH₃, each of R⁴, R⁵, R⁶ and R⁷ are hydrogen, and R¹ is 4-chlorophenyl, then R³ is other than a group CH=CH(CN)₂.

10. A method of preparing a compound of formula (I) as defined in claim 1, which method comprises reacting a compound of formula (VII)



5

(VII)

where R^4 , R^5 , R^6 and R^7 are as defined in relation to formula (I), R^2' is a group R^2 as defined in relation to formula (I) or a protected form thereof, and R^3' is a group R^3 as defined in relation to formula (I) or a precursor thereof; with compound of formula (VIII)

10

 R^1-X-Z^1

(VIII)

where R^1 and X are as defined in relation to formula (I) and Z^1 is a leaving group; and thereafter if desired or necessary carrying out one or more of the following steps:

15 (i) changing a precursor group R^3' to a group R^3 or a group R^3 to a different such group;
 (ii) removing any protecting group from R^2' .